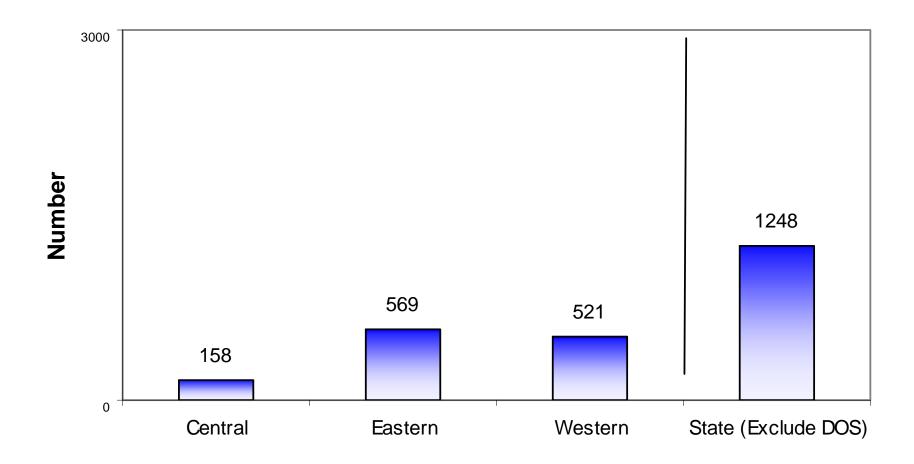
State Trauma Care Committee Report November 17, 2008

Montana Trauma Registry January 1 – June 30, 2008







Central Region Facilities

Fort Benton - Missouri River Medical Center	•
Big Sandy - Big Sandy Medical Center	•
Choteau - Teton Medical Center MAF	•
Conrad - Pondera Medical Center	10
Chester - Liberty County Hospital	4
Great Falls- Benefis Health Care	83
Townsend - Broadwater Health Center	;
Helena - St. Peter's Hospital	37
White Sulphur Springs - Mountainview Med Ctr.	2

147



Ennis - Madison Valley Hospital	•
Livingston Memorial Hospital	24
Sheridan - Ruby Valley Memorial	1
Roundup Memorial Hospital	1
Culbertson - Roosevelt Memorial Med Ctr	6
Harlowton - Wheatland Memorial Hospital	3
Malta - Phillips County Medical Center	1
Red Lodge - Beartooth Hospital & Health Center	8
Wolf Point - Northeast Montana Health Services	12
Poplar - Northeast Montana Health Services	11
Glasgow - Frances Mahon Deaconess Hospital	7
Big Timber - Sweet Grass Community Hospital	10
Hardin - Big Horn County Memorial Hospital	6
Crow Agency - IHS Hospital	39
Bozeman Deaconess Hospital	100
Billings - Deaconess - Billings Clinic	209
Billings - Saint Vincent Hospital & Health Center	122
Colstrip Medical Center	7
	573



Western Region Facilities

Plains - Clark Fork Valley Hospital	15
Polson - St. Joseph Hospital	8
Anaconda - Community Hospital of Anaconda	14
Dillon - Barrett Hospital	16
Superior - Mineral County Hospital	20
Ronan - St. Luke Community Hospital	11
Deer Lodge - Powell County memorial Hospital	15
Kalispell Regional Hospital	164
Missoula - Community Medical Center	44
Butte - St. James Community Hospital	58
Missoula - St. Patrick Hospital	168

533

2008 Patient YTD Demographics

77% ages 10-64 7% < 10
$$14\% \ge 65$$
 (26% > 55)

78% White 13% Native 3% Other 6% ND (Western 2 facilities = 62^{cases}/79%)

65% Male 34% Female

2008 Patient YTD

Demographics

91% Blunt 7% Penetrating

2% Burns 1% Anoxia

39% MVC 26% Falls

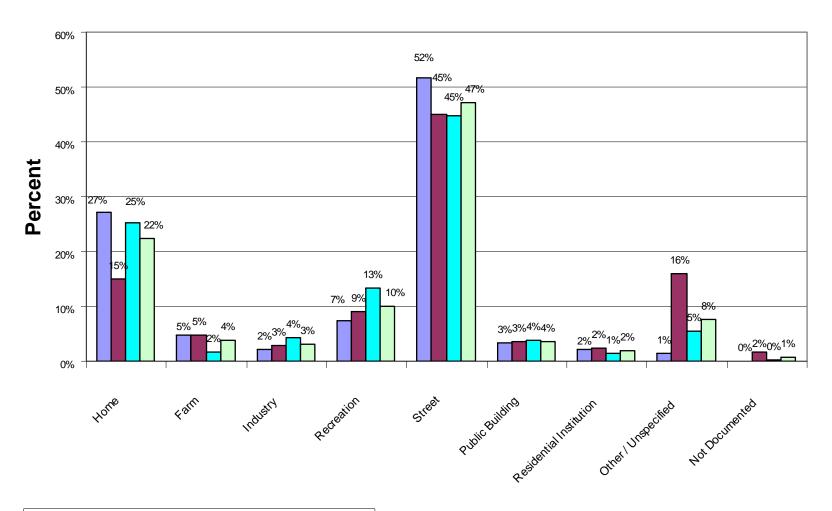
13% MC 4% Horse

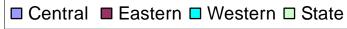
4% Assault 4% Pedestrian

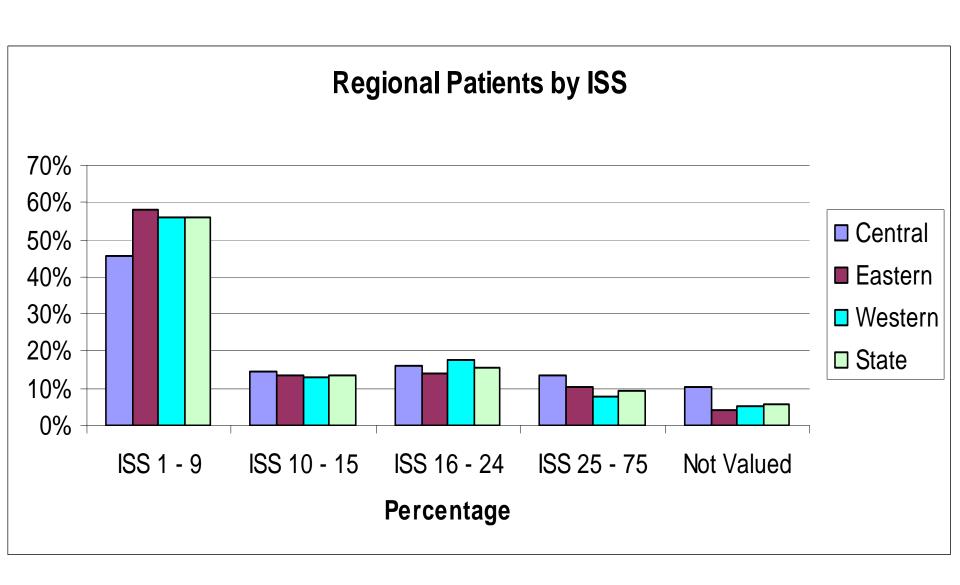
2% Bicycle 1% Other

8% Not Documented (100 cases)

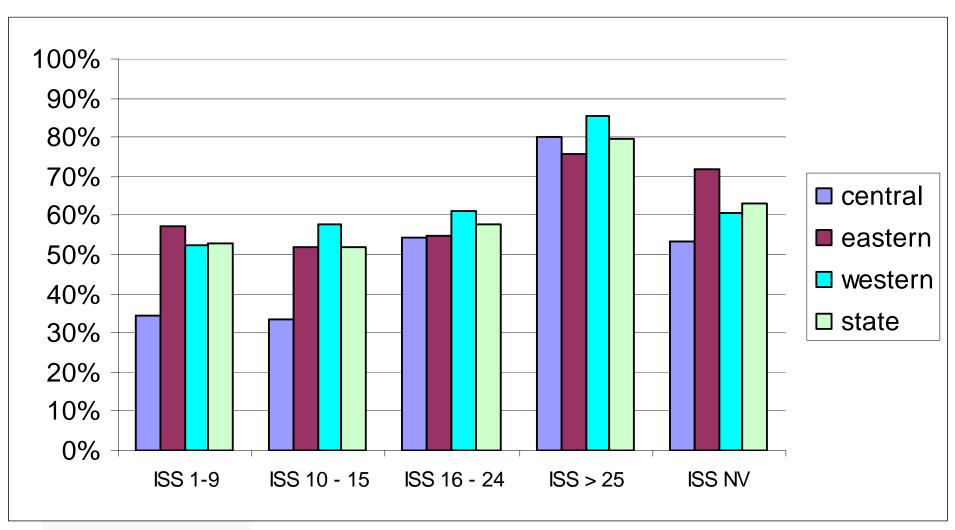
Location by Region Comparison



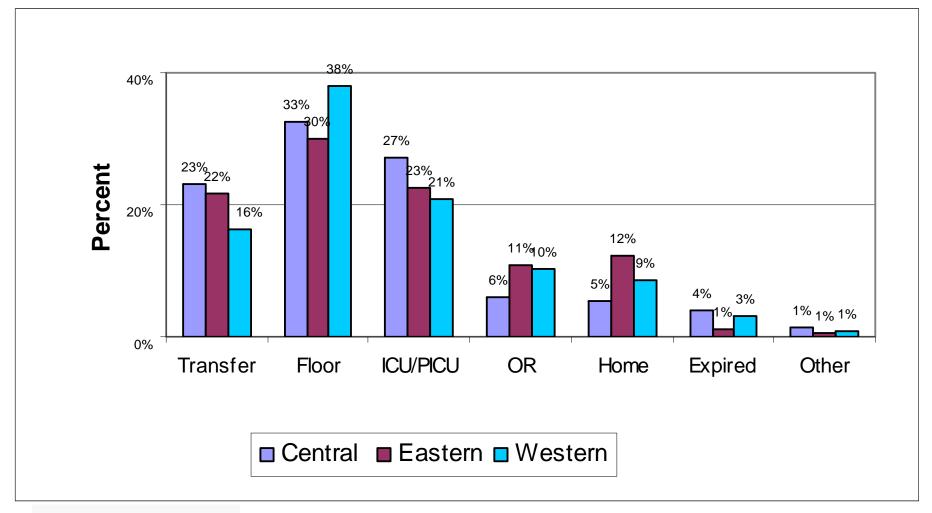




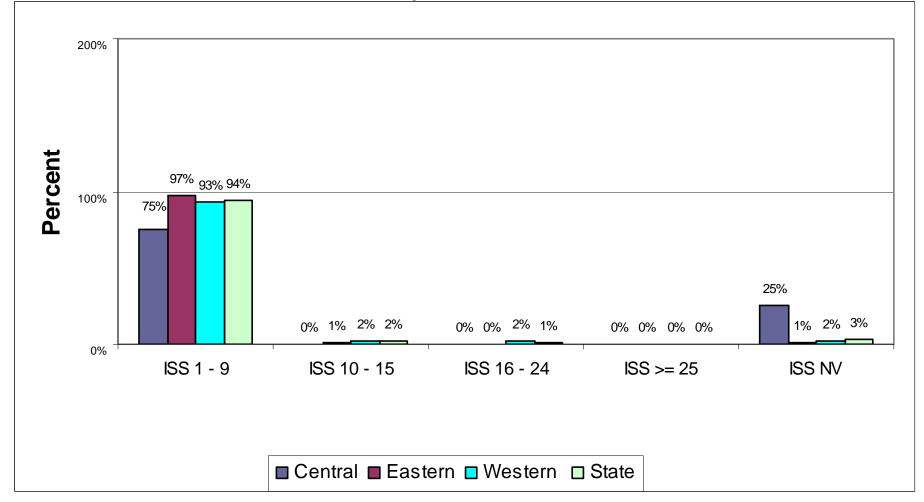




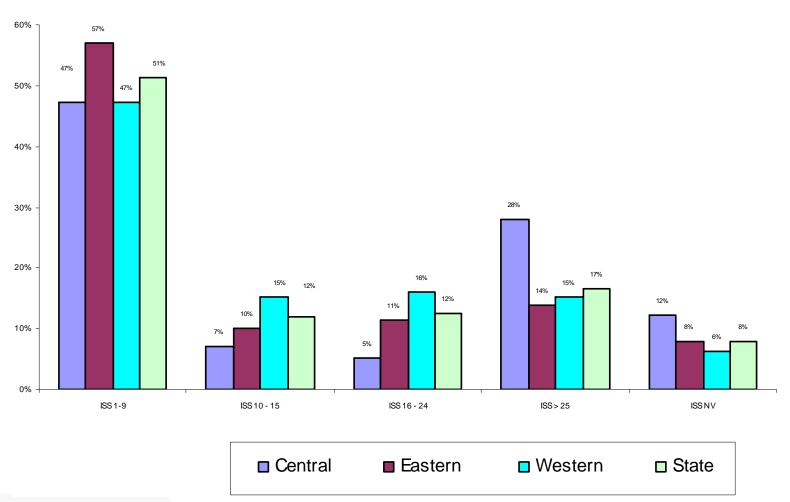






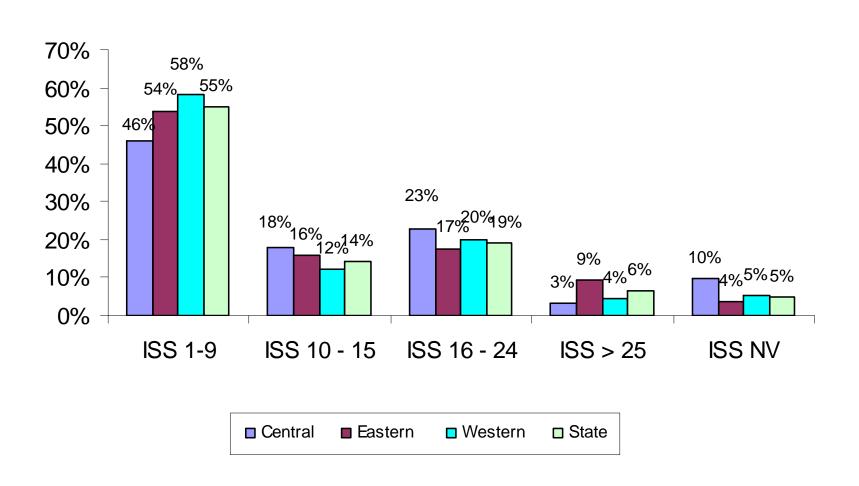


STATE **ED LOS: Less than 120 Minutes**

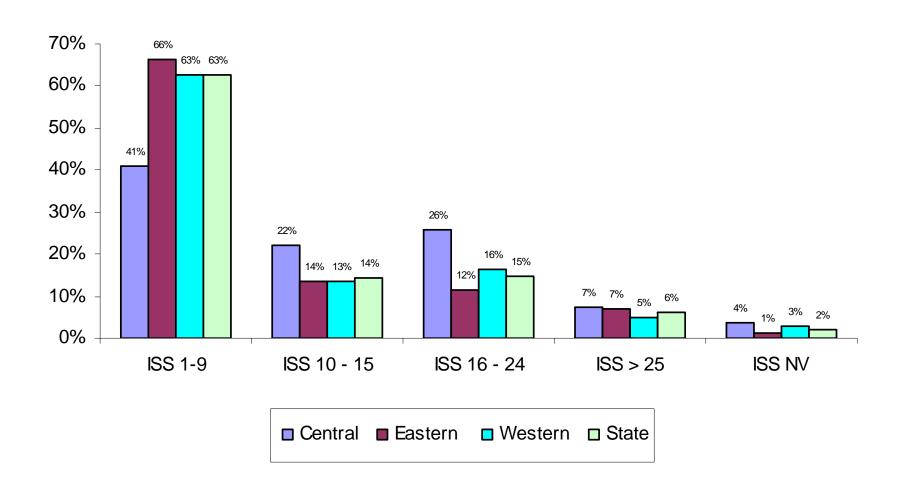


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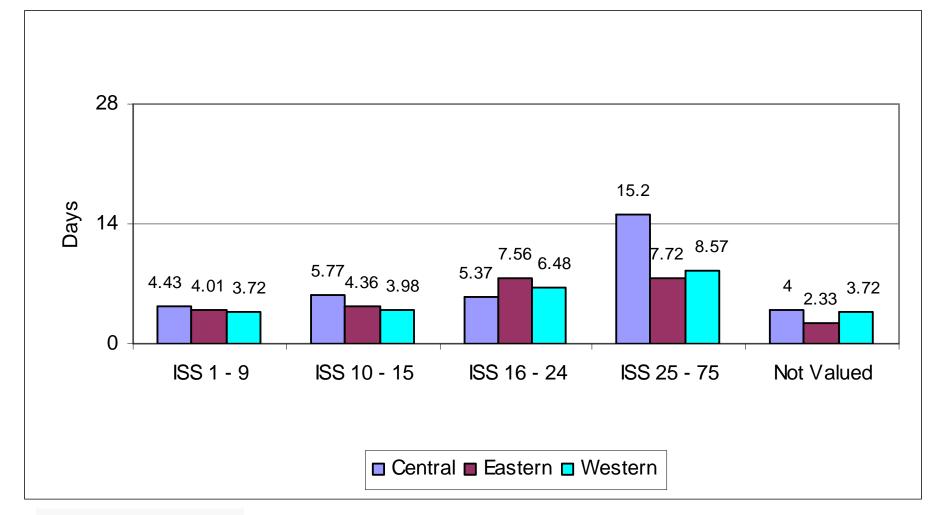
STATE ED LOS: 120 - 239 Minutes



STATE **ED LOS: >239 Minutes**

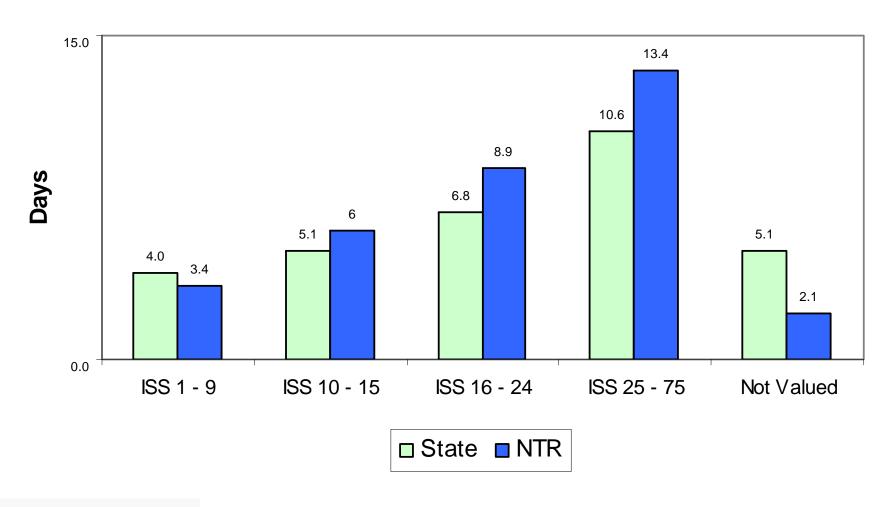




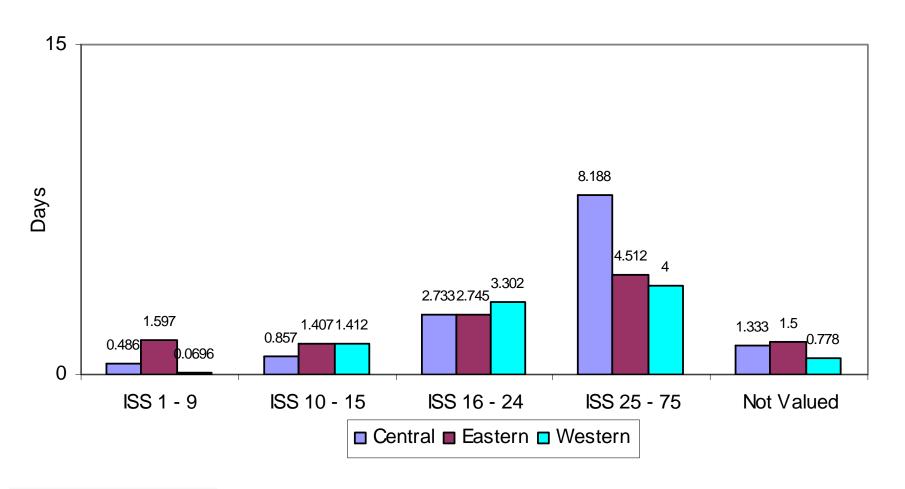


Avg. Hospital LOS

(comparing State and National Trauma Registry)

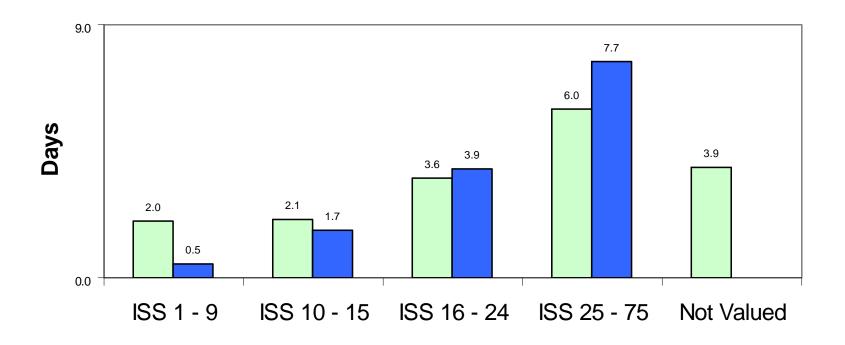






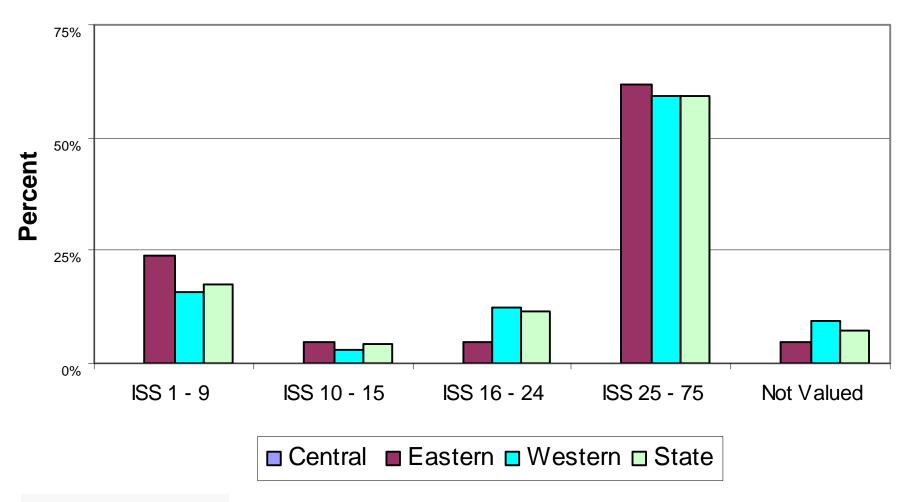
Avg. ICU LOS

(comparing State and National Trauma Registry)



☐ State ☐ NTR





Fatalities (no DOS) Injury Causes Of Fatalities N = 58 YTD

Falls - 17 (29%)

MVC - 12 (21%)

MCC - 7

Pedestrian – 2

Crushed- 4

GSW = 13 (22%)

SI = 8

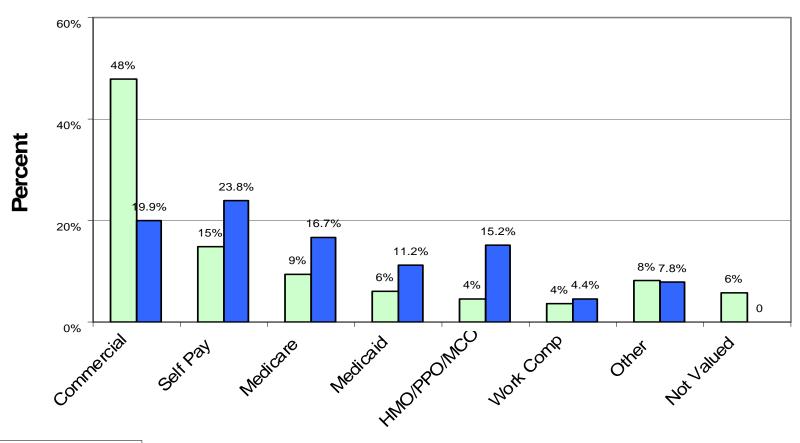
LE = 1

Assault = 1

Other GSW = 3

Fatalities

Payors



☐ State ■ NTDB

Performance Indicators

1st – 2nd Quarters 2008 January 1 – June 30, 2007

PI # 1: Trauma Patients Transported per EMS Without Trip Report in the Medical Record

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Prehospital Transport: YTD 886 (71%)
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(07: 72%)

Report available: YTD 633 (71%),

(07: 74%)

No Report: YTD 227 (29%), (07:25%)

ND: 4 (<1%)

PI#1cont'd

Ambulance Transports YTD

Central: 122 (83%)

+ Report: 106 (87%), No Report 12 (10%), ND 4

Eastern: 387 (67%)

+ Report: 274 (71%), No Report: 110 (28%), ND 3

Western: 377 (71%)

+ Report: 253 (67%), No Report 105 (28%), ND 19



PI # 1

- Incorporate EMS trip report tracking w/PIN network PI activity
- Refer to ECC for continuity of PI efforts
- Utilize "reinforcement/reminder" forums: TEAM Courses, RTAC meetings, feedback provided to CAH paper TR abstract users;
- > Feedback from larger facilities w/transfers

PI # 2: Transferred Trauma Patients w/ISS > 15 & time at first facility > 6 hrs

3 YTD transfers w/ISS ≥ 15 & time @ facility ≥ 6 hrs

Avg. hours = 6.6 hrs

2 transferred from ED; Avg time; 6.6hr

1 transferred after adm: 73 hrs

PI #3: Trauma patients with ISS ≥ 15 and ED time ≥ 2 hours Level II facilities excluded YTD: 91 patients

- **■YTD Average ED time: 188"= 3.13hr**
- □YTD Average ISS: 21
- Now looking at number of patients of facilities, mean & range of that facility & dispositions

PI # 4: Trauma patients who died with an ISS < 15 N= 15 YTD

Central Region N=3

2 "undercoded" due to lack of complete Dx of injuries in the ED

1 cardiac arrest which caused the MVC but died from cardiac arrest

Eastern Region N=6

4 "undercoded" due to lack of complete Dx of injuries in the ED

2 low ISS w/+ cormorbidities

Western Region N=6

4 "undercoded" due to lack of complete Dx of injuries in the ED

2 low ISS w/+ cormorbidities

м

ISS 9; 3 Falls all 80+ yr old pts + comorbidities of CHF,HTN,COPD, all +coumadin therapy (all died w/in days)

ISS 13; Accidental GSW chest: fx clavicle, 2 fx ribs, open intrathoracic injury, died ED

ISS 9; 48 yr old male equipment rollover w/crush injury to pelvis, femoral artery disruption w/hemorrhage; died next day



"Under/Low Code" examples

- ISS 1; 32 yr old male w/stab wound to chest ,died ED
- ISS 1; 35 yr old female SI hanging (anoxia) died ED
- ISS 1; 34 yr old male MCC w/head trauma, died ED
- ISS 2: 44 yr old male w/2 GSW to posterior thorax, died ED

PI # 5: Patients w/GCS ≤ 9 & not intubated Patients NOT transferred YTD:8

1st quarter: 1

MVC brief trauma code in ED/no ETT

2nd quarter: 7

- 4 brief trauma codes in ED/no ETT
- 2 w/GCS 8-10, both + BAC, both improved LOC by adm; both D/C w/GCS 15
- 1 elderly fall after seizure, ED GCS after addt'l seizure: DNR/DNI; SAH- ret'd SNF w/GCS 15 after 5 hosp. days

PI # 5: Patients w/GCS ≤ 9 & not intubated
Transferred Patients YTD: 3

Ist quarter: 1

Ped fall

Scene/1st ED GCS UNK

2nd ED GCS 9, head CT negative

Rapid clearing GCS (15) by ICU adm (90")

Dism to home after 2 hospital days, 1 ICU day,

Concussion, brief LOC

PI # 5: Patients w/GCS ≤ 9 & not intubated Transferred Patients

2nd quarter: 2